

THE CHALLENGE OF CHANGE*

Thomas T. Stout**

My charge is to discuss with you the Challenge of Change and I am pleased to accept that charge because the challenge of change is very real. But, I confess to you that at this precise moment, when I have 25 minutes at my disposal, the greatest challenge that confronts me now is to persuade you, in so short a time, how genuine the challenge of that change can really be.

Please understand, I am not an alarmist.

But, I am concerned.

I am not too concerned, however, about those challenges of the next few months that have caused such fashionable alarm over the past few months. Let me simplify my task, therefore, for both of us, by dividing my brief remarks into an array of topics which ranges from near-term specifics that are frightening but not really challenging to long-term generalities that are genuinely challenging but not yet very frightening. The early part of this

*Presented at the Seventh Annual California Livestock Symposium, Fresno, May 29-30, 1975. This paper has benefited from resources I have drawn upon in Washington, D.C., and elsewhere. I have been aided by conversations with Dawson Ahalt, Staff Economists Group, USDA; Richard Crom, Paul Nelson, Donald Regier, and Donald Seaborg, Economic Research Service, USDA; Paul Fuller, Robert Leverette and James Ray, Agricultural Marketing Service, USDA; Gerald Engelman, Packers and Stockyards Administration, USDA; James Berg, Cook Industries, Memphis; Gene Futrell, Iowa State University; Joseph Davis, John Gambel, Ernest Gooch and Loys Mather, University of Kentucky; James Kendrick, University of Nebraska; Robert Jacobson and Bobby Van Stavern, The Ohio State University; and Willard Williams, Texas Technological University. Not all of this paper derives from these conversations, however. Moreover, to cite them is not to imply their support or approval. Perhaps some of the things I say here may be found by some to be ill-considered, erroneous, or even objectionable. Finally, any errors of fact contained herein are my own.

**Professor, Department of Agricultural Economics and Rural Sociology, The Ohio State University and Ohio Agricultural Research and Development Center, Columbus, Ohio.

paper deals therefore with prices and outlook; the latter part deals with forces which are eroding the familiar and fondly regarded identity of family-farm agriculture. I would like to begin with a review of prospects for the 1975 crop year.

This Year

This year's grain crop expectations appear at the moment to run about like this: corn, 6.0 billion bushels; wheat, 2.0 billion bushels; soybeans, 1.5 billion bushels; and grain sorghum, 850 million bushels. Now, this kind of output has led to pessimistic price expectations among grain producers. But I think some factors besides U.S. production need to be considered, particularly for corn and wheat. This year U.S. farmers will enter the harvest season with empty storage bins and little inclination to accept harvest-depressed prices in inflationary times. I think there will be substantial on-farm storage before farmers will give anything away at harvest prices. The normal seasonal downswing in corn prices, therefore, may not reflect a price-depressing 6.0 billion bushel crop because of on-farm storage.

A consideration of special interest to pessimistic wheat producers is that there is a very small difference in world markets between too much wheat and not enough wheat. The U.S., at first glance, appears to be producing too much wheat but the U.S. is not the only producer of wheat in the world. Conditions in both Canada and the Soviet Union reportedly depart from the ideal. We have specific information of some planting difficulties in Canada and vague information of severe difficulties in the USSR. Even now the bearish attitudes that prevailed in wheat a few weeks ago are taking an optimistic turn and another few weeks could find them quite bullish. Canadian production, it appears at present, could vary anywhere between 14.5 and 16.5

million tons. In the USSR, planting season conditions reportedly are very hot and dry and seed germination is poor. From the information that can be gleaned, the Russians will need a 95 million ton crop to meet their needs and their prospects for getting it are poor. Below 95 million tons they will have to draw on carryover and below 90 million tons they will have to enter the world market as a buyer. In 1973 they produced 108 million tons, but last year managed only 83.8 million tons and their carryover position already is eroded by that disappointing 1974 crop. So it is possible, in the very volatile world wheat market, that this could be a timely year for the U.S. to produce a bumper crop of wheat. A substantial world demand can emerge and, other than France as a minor supplier, the only major ability to respond to that demand is here in the United States.

Let's turn to meat production and consumption. We are now in a surplus position in beef and a shortage position in pork and broilers. Some feedlots are operating at capacity and some are idle. We are consuming increased quantities of non-fed beef and there are plenty of calves and yearlings out there that have not been placed on feed. I do not find this a basis for pessimism, however, and, for the present, I do not think it reflects a basic shift in consumption or production patterns. I think some basic shifts may occur in the future, but I'll come to that in a minute. Right now I want to talk about 1975.

We began this year with a January 1 inventory of 131.8 million cattle and calves on farms and we will probably begin next year with about 131.1 million head. Cold storage stocks of beef declined from 414 million pounds in January this year to 350 million pounds in April. In total, during those four months, nearly 500 million pounds of beef were withdrawn from cold storage stocks. Broilers showed a similar pattern, stocks declining from 430 million pounds in January to 342 million pounds in April. Pork stocks

increased from 295 million pounds in January to 341 million pounds in April, but this is a normal seasonal reflection of the slaughter of the fall (1974) pig crop. Overall, 1975 pork production will be down more than 2.2 million pounds from the 1974 level of 13,582 million pounds.

How is the market receiving all this? Futures trading in cattle ranges presently from a high of \$48.75 next month to a low of \$38.85 next February, 1976. I think this may be just slightly pessimistic. Futures trading in hogs ranges down from a high of \$47.50 next month to a low of \$42.20 next April. I think this is optimistic. It has been pointed out to me that in the past 15 years there has been only one month in which the monthly average price for hogs was higher than the monthly average for cattle. Yet now we see consistent futures market expectations for a continuation of this abnormal price relationship. I don't think it will happen.

Let me close this section quickly with a summary of what I do think will happen: Grain prices and meat demand will offer favorable feeding margins again this fall. Beef consumption this year will exceed 120 pounds per capita. I think the odds strongly favor harvest soybeans at about \$4.00 per bushel, soybean meal at \$100 to \$120 per ton, and corn between \$2.25 and \$2.50 per bushel. Prices below these levels would bring, I think, government action in the form of non-recourse loans that would net out something only slightly below these prices. Longer term cattle prices will depend in part on the swiftness with which broiler and pork production will turn around but, for the present, neither can turn around fast enough to prevent beef from taking advantage of a position that only appears at present to be a surplus. Someone is going after the consumers' meat dollar this year and beef is in the best position to get it. I expect 1975 fourth quarter cattle prices to average above \$40.00, perhaps above \$42.00. If feed grain and supplement

prices come in at the level I suggest, the cost per pound of gain on fed cattle should decline substantially and a brisk market for feeder calves could develop this fall. There is the chance that autumn optimism could take its customary toll and calf prices could be bid too high. Let's take an illustration: Assume the expectation of \$42.00 finished cattle and assume total cost of gain at 40¢ per pound. A finished 1000 pound steer at \$420 less a 500 pound gain at \$200 would appear to warrant a \$220 price tag on 500 pound calves. That means 44¢ calves this fall. I think it will happen.

The Next Few Years

Much of the Challenge of Change for the future can be found in a broad view of developments surrounding the livestock-meat industry now and in the next few years. I think these include the following characteristics: (1) continued rising costs, prices and interest rates, (2) continuing levels of unemployment that are higher than have been considered acceptable in the past, (3) a continuing energy crisis, (4) declining nitrogen fertilizer prices, (5) increased federal regulation of the livestock-meat industry, and (6) a host of consequences bearing directly on the industry. These include: (a) increased non-fed beef consumption, (b) increased use of meat analogs, (c) shorter fed cattle, (d) a return of some share of the cattle feeding business to the Midwestern barnyard feedlot, (e) more meat quality attributes being affected by the meatpacker rather than the feeder, and (f) some significant changes in federal grading and federal market news reporting. There is, finally, another set of variables which includes: (1) increased attentiveness to management practices in agriculture, (2) an increasing fragmentation and disunity in the agricultural community, and (3) increasingly urban-oriented public policy for agriculture which, by standards that

are considered traditional, will amount to an urban encroachment on rural lives. But, I would like to reserve comment on these latter three developments for my closing remarks, for it is here that the Challenge of Change would appear to be the greatest.

A brief review of these developments will explain why I take these positions. I think inflation and unemployment will remain troublesome simply because the federal deficit is so huge and because the American industrial plant is getting out-dated. The federal deficit was \$43 billion in 1940; by fiscal 1975 it had grown to \$509 billion. In fiscal 1976, beginning this coming July 1, we will add to that federal deficit another \$86 billion in one year! Industry needs modernization; unemployment rises partly because the labor force continues to grow at a rate more rapid than a dated industrial plant can absorb it. Hence, both the industrial base and the federal debt need to be financed and the demand for capital will be huge. All this is going to COST -- in capital letters. We should expect, therefore, continued high and rising cost, prices and interest rates.

The energy crisis is real. Oil is the basic fuel to which we have become accustomed and it is a depletable resource, with a time horizon somewhere around 1990. Most of it is controlled by a nationalistic cartel and it is monopoly priced. Even if we could find additional reserves in remote and costly regions, its recovery would be expensive and its accounting would be done with the devalued dollars of future inflationary times. Accept, therefore, the fact of high-priced oil. Speculate that perhaps the OPEC cartel has done us a favor. It has ignited the serious search for alternatives before the last moment arrives later in the century.

It seems inconsistent that I should suggest lower fertilizer prices in a time of rapidly rising costs. This is because nitrogen production capacity appears to be increasing more rapidly than potential demand. There will not be another 50 million acres come into production in another few years as in the past. Also, I think that in recent years of farmer prosperity there has been some understandable tendency on the part of input suppliers to share in that prosperity and input prices have sometimes risen disproportionately. If expectations for the future in nitrogen production include a straight line continuation of the recent past, the industry will be disappointed. Large profit margins, over-capacity, a slow-down in demand, and competition all suggest that fertilizer prices will level off or decline.

Federal regulations affecting the livestock-meat industry can be divided into two categories: regulatory, or enforcing; and facilitating, or assisting. Right now much attention is focused on the latter of these two in the current scuffle over federal grades for beef, the dropping of the conformation requirement and the addition of the yield grade requirement. I am sure there is method in the madness here, if indeed there is madness here at all, but a point remains to be remembered. Federal grades are voluntary. They are not mandatory. They are a facilitating and not a regulatory aspect of government in business.

There is a regulatory aspect to watch, however. On July 1, 1974, amended portions of Part 201 of the Packers and Stockyards Act became effective and henceforth prohibited packers from owning or financing custom feedlots. Quite briefly, the basis for this regulation is a concern for maintaining competition and competitive pricing in live cattle. But, at least two side effects are apparent. At least a portion of the capital customarily required for the operation of large commercial feedlots has been removed from the list of eligible participants. This may not be a major consideration, but

it is there. The second effect is that, while there may be restraints on packers relative to their feedlot activities, there are no similar restraints on feed manufacturers who might wish to control more of the market for the product they have to sell. The law gives them more elbow room, and at a time when feedlots could be purchased almost for salvage value, we did see some activity by feed manufacturers to move in this direction. It is reminiscent of the early days of integration in the broiler industry, and could well have some of the same long-term effects.

I think another aspect of regulatory activity by the Packers and Stockyards Administration should be anticipated, and that is a movement to improve and expand the bonding requirements for livestock buyers of all kinds. At present, the regulation can reasonably be regarded as incomplete and ineffective. The recent ABP bankruptcy has brought increased producer attention to this inadequacy and a sharp realization that those who, presumably, the law is designed most to protect, i.e., producers themselves, find themselves residual claimants to any scraps that may remain after the payment of court costs, labor, taxes, liens and mortgages and any other claims under U.S. law. That's correct. These are all prior claims. After these have been met, if they can be met, producers can hope to be compensated from any funds that may be left. I think some corrections in this aspect of P & S regulation probably will occur in this decade.

The host of interrelated changes within the industry can be accounted for in this way: I see a reprieve for the Midwestern feeder in the shortage of capital, management, and surplus feed grains and water in the large commercial lots and their locations. But, only a reprieve. The increase in non-fed beef consumption is a continuing trend and not attributable entirely to grain or energy shortages. It is more directly related to the

growth of fast food chains and the rise in hamburger consumption. Part of the consequence of this can be increased cattle inventories, increases in cow-calf herds, and some net shift of that segment of the industry to areas east of the Mississippi where surplus water and grass are available. I think, given the evidence, analogs are established competitors for meat presently at least as extenders for non-fed beef such as hamburger and prepared meat dishes. I think we are entering an era of short fed beef because I have seen technology at work in the packing plant in the form of tenderizing and forming machinery that can accomplish in five minutes what would take as many weeks or more to accomplish in the feedlot. To classes of students I have characterized this accomplishment as having the ability to raise the palatability quality of beef by one grade and sometimes more. That sounds dramatic and it is an overgeneralization, but I emphasize that the net effect of these new developments is dramatic and it is definitely moving in the direction I have emphasized to students. Changes in palatability that are not related to breeding or feeding practices mean that live grades for cattle could quickly become obsolete. If grades lose their functional merit, much of the ability of buying and selling on the basis of description rather than inspection is eroded. Hence, I conclude that both federal grades and federal market news reporting systems are going to have to adjust rapidly and significantly just to keep abreast of changing conditions. I doubt that they will be able to keep abreast, but I think they will try. There is much more that could be said here, but there is not the time. Surely it will be discussed at length in the two days before us now.

The Years Ahead

Most revolutions are quiet revolutions; they are done before we knew they occurred. Something very like this has happened in agriculture. A

revolution is not merely occurring; it is for all practical purposes already over. In 1940, the Bureau of the Census recorded 23 percent of all U.S. citizens living on farms. In 1970, a generation later, the figure stood at 5 percent. Agriculture will never fuel another rural-urban migration. Today, 7 percent of all farms account for over half of all farm income, and half of all farms share only 5 percent of all farm income. That latter half also averages a negative return on investment; they are refuge farms, they are not a real part of modern agriculture and never will be again. Modern agriculture is a very concentrated, very commercialized, very industrialized enterprise. The idealized image of the family farm is becoming a part of our national heritage -- and hence a part of our folklore. There are in fact very few farms, far less than a quarter million, that conform to the standard stereotype of family owned and managed capital generating more than half the family's income.

* * * * *

What has happened is this: If we are to talk about the Challenge of Change, we must recognize that the Change has already occurred and all that is left is the Challenge of living with the consequences. The challenge is an urban challenge, it is an industrial challenge, it is a management challenge, and it is a challenge that you accept rather than reject -- a revolution that has already occurred. You cannot wish it away. You cannot defend against it. You cannot successfully resist it. You cannot deny that it is happening. It has already happened.

* * * * *

You can enjoy it or you can regret it, but you must join it. You cannot hide from it and remain a part of commercial agriculture. The 20th Century is indeed a battleground where the science of the future has

encountered the traditions of the past. Twenty-first century technology has conquered 19th Century visions of the good and proper life, and you were in the war.

It is difficult to reconstruct the causes and the sequences of our wars of the past, and it is difficult and presumptuous perhaps to recount how this one came and went, but let me suggest the following sequence of events. The aggressor, as it has often been, was science and technology. New information poured into agriculture in the post World War II era at a rapid and increasing rate. The information advanced quickly from small and simple to costly and complex. An alert minority moved rapidly to adopt even more demanding technology while a complacent, confident and even indolent majority began to flounder in confusion. The technological demands of complexity and cost translated into efficiency related to size. Bigger equipment could be kept efficiently occupied only over greater acreage. Two things occurred. A few buyers consolidated larger farms from many sellers, and crop specialization began to take the place of crop rotation.

Specialization to provide the scale economies to cover those formidable operating costs brought with it an unexpected and, now seen with hindsight, perhaps an unbearable cost. It cost agriculture its quality of brotherhood. It began to erode the agrarian identity of agriculture. The fabric of the rural socio-economic system began to bleach and rot in the hot sun of applied science. Specialization gave rise to special interest groups. Townships and counties lost their special charm as ancestral homes for family clans. The common interests of specialized corn producers or cattlemen or pork producers began to over-ride the common interests of neighbors when one man's income became his neighbor's costs.

What is costly about this is that as production agriculture at once became a small political minority and needed more than ever a clear political voice, its essential cohesiveness was lost, and replaced by a divisiveness that characterizes and emasculates the political capacity of agriculture today.

Agriculture is small and fragmented. It is divided by the special interests of specialized production commitments. It is divided between modern science and traditional life. It is outnumbered and outflanked. It is encroached upon by an urban public accustomed to abundance as a right of citizenship and increasingly aware of its political power by merit of its size, and aware of its cohesiveness by merit of its common interests as citizens, consumers, and advocates of urban superiority.

It will have its way with you and your agriculture, as you, in your turn, had your way. Now, today, you are as divided and disorganized and engulfed by a technological tidal wave as were the Indians a hundred years ago. The only difference between you and that divided brethren who were stewards of the land before you is that, today, you have perhaps 3 percent more votes than the Indians had. If you don't know how to use that small percent effectively, then I say to you now that the Indians and the reservations of the past wrote the future for the farmers and the spring lineup at the county ASC offices of the present.

It has been said that the future belongs to those who prepare for it. Today, it is safe to say, there are groups and disciplines that make a profession of preparing for the future in order that it may be theirs. I hope, for your sake, that you are among them or at least aware of them for, if you are not, then surely you are among the people who are to be left behind.

This morning your Director of Agriculture, Tim Wallace, pleaded for unity in the agricultural community. But, if you are like agricultural people everywhere, you probably will disappoint him. Yet, many statements of purpose which in time became national goals began in California and spread across the land. If you could accomplish the agricultural unity your state director begged of you, then surely you would deserve the position of leadership that should be enjoyed by the greatest agricultural state in the greatest agricultural nation.